



US Army Corps
of Engineers

Construction Bulletin

No. 95-14

16 June 1995

No. Issuing Office: CEMP-CE Issue Date: Exp. Date: 31 DEC 97

CEMP-C

Subject: Structural Steel Fabrication Plant Certification

Applicability: GUIDANCE

1. **REFERENCE:** Guide Specification For Military Construction, CEGS-05120 dated April 1989, Structural Steel.

2. **PURPOSE:** This Construction Bulletin (CB) highlights the guide specification requirement that structural steel be fabricated in a plant certified by the American Institute of Steel Construction, Incorporated (AISC).

3. **BACKGROUND:**

a. The referenced guide specification contains numerous references to AISC publications and specifications governing design, fabrication, and erection of structural steel on Corps of Engineers construction projects. Of particular interest to our Quality Assurance (QA) representatives are guide specification paragraphs as follow:

1) Paragraph 1.3 Submittals, sub-paragraph SD-13 Certificates, section Fabrication which requires that the contractor submit a copy of the AISC certificate indicating that the fabricating plant meets the specified structural steelwork category. A copy of this certificate is at Enclosure 1.

2) Paragraph 3.1 Fabrication which requires the fabricating plant be certified under the AISC quality certification program for the particular category of structural steelwork required for the construction contract (these categories are described in the guide specification).

3) The Additional Notes following paragraph 3.2.4 Field Priming, Additional Note C regarding the designer's choice of requiring or not requiring AISC certification for structural steel designed for a particular project.

b. For most construction contracts the designers include the AISC fabrication plant certification requirement of guide specification paragraph 3.1. However, Additional Note C, mentioned in 3.a(3) above, states, "The requirement for AISC fabrication plant certification may be deleted at the discretion

of the designer. This decision will be based on the complexity of the design and the criticality of the connections. If moment connections are involved, AISC certification is recommended. The quantity of structural steel in the project should be a point of consideration." It is important that QA representatives understand that some contracts may require this certification and others containing structural steel may not.

c. A recent letter from the president of AISC to Engineering Division, CEMP-E, states the Institute has received inquiries regarding inconsistent interpretations of the guide specification by some Corps of Engineers districts. While this matter is being reviewed by Engineering Division from the design standpoint, the letter raises possible concerns from the construction quality assurance standpoint as well.

d. The AISC certification program audits critical steel fabrication functions throughout the design review/take-off stage through layout, fitting, fabrication, in-plant quality control (QC), and shipping processes. In their letter, AISC points out that eleven specific functions which occur prior to commencement of actual shop fabrication are considered so essential that if an applicant for certification falls below the applicable standard for these functions, that applicant will not receive AISC certification. If the requisite quality standards are not in place prior to commencement of shop fabrication, many of the safeguards which the certification program was designed to provide will conceivably be lost.

e. The AISC certification program is administered by experienced, non-biased auditors in a manner designed to be uniformly applied on a national basis. The certification criteria is applied uniformly to all applicants and membership in AISC is not a prerequisite or requirement of certification. From the date of initial application to the date of certification, the process usually takes a minimum of two months to complete, with no guarantee the applicant will pass. AISC states that many applicants are not successfully certified upon their initial application because of the many prefabrication activities which must be addressed and in place. The certification process involves a detailed on-site audit of the fabrication facility. It is important that QA representatives understand this is not a quickly acquired certification, particularly in the situation where the contractor advises them that its structural steel fabrication plant will apply for AISC certification after contract award and before the Preparatory Inspection (P/I) phase for structural steel.

4. CONSTRUCTION QUALITY ASSURANCE:

a. During the pre-award phase of a construction project requiring structural steel, QA representatives involved with the BCOE review process should note whether or not the specifications

require AISC certification of the structural steel fabrication plant. If certification is required, the submittal register provided by the designer should be checked to assure the required AISC certification submittal is listed. Also during the pre-award stage for contracts requiring this AISC certification, the contract specific QA Plan supplement should be annotated to emphasize review of this submittal prior to the P/I phase for this work.

b. In the post-award phase of a construction project requiring structural steel and where the specifications require the AISC fabrication plant certification, this requirement should be brought to the contractor's attention during the QA/QC coordination meeting or at another time well ahead of the P/I. When reviewing the certification submittal, QA representatives should confirm it addresses the specified structural steelwork category. If the certificate has not been submitted by the time the P/I is held, the contractor's QC Chief should be advised that continuation of the P/I is not recommended until certification is submitted. In no case should the contractor deliver structural steel to the jobsite before submitting the required AISC certification. This will help assure the certification is not overlooked prior to actual delivery of the steel.

c. During the structural steel P/I phase for contracts requiring AISC certification, QA representatives should assure that steel which is currently onsite has documentation verifying fabrication at the plant noted in the AISC certification. This should be rechecked at the Initial Inspection (I/I) and verified periodically throughout the Follow-up Phase.

5. This CB has been coordinated with Engineering Division (CEMP-E) and Operations, Construction and Readiness Division (CECW-OC). Point of contact is Don Bleibtrey at 761-0204.

Encl



CHARLES R. SCHROER
Chief, Construction Division

American Institute of Steel Construction, Inc.

This is to certify that

ABC Fabricators, Inc.

Chicago, Illinois

*has the personnel, organization, experience, procedures, knowledge, capacity and
commitment to produce fabricated structural steel of the required quality for*

Conventional Steel Structures

Complex Steel Structures

Major Steel Bridges

Sophisticated Paint Systems

Fracture Critical Members



President, AISC

Initial Certification: September 1, 1977

Audit Date: September 1, 1992

Auditor,

Valid Until: September 1, 1996

ENCLOSURE